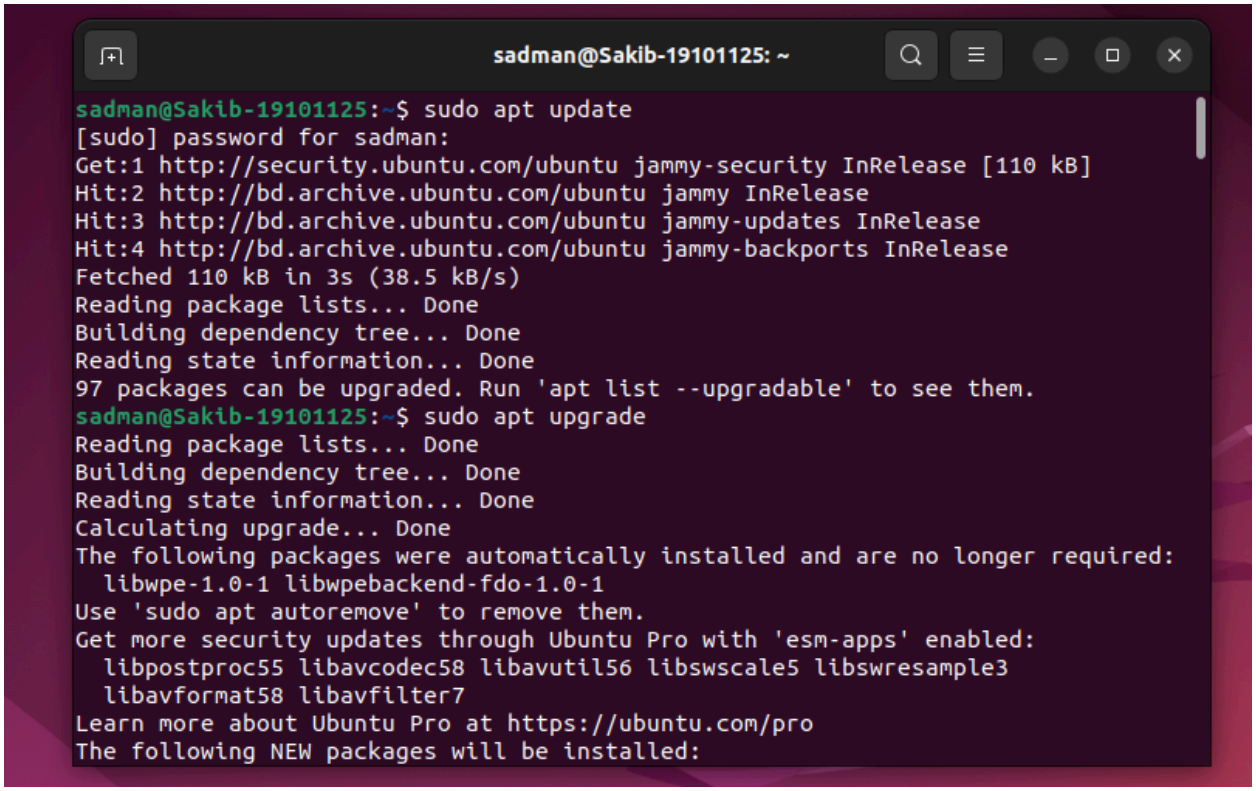
Part-1:Install KVM on Ubuntu 22.04

1) Update Ubuntu 22.04

Code: **$ sudo apt update**



2) Check if Virtualization is enabled

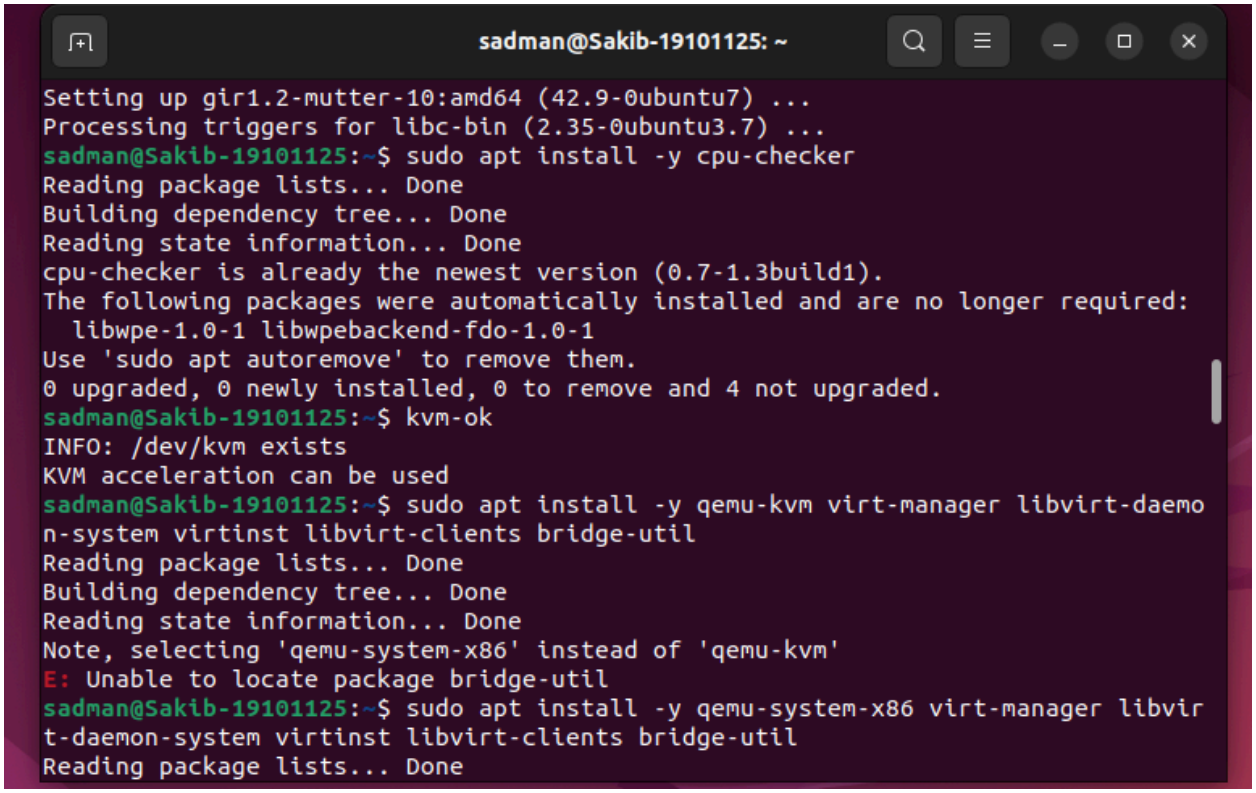
$ egrep -c '(vmx|svm)' /proc/cpuinfo

Verifying if KVM virtualization is enabled by running the following command:

```
$ kvm-ok
```

Installing the cpu-checker package as follows:

```
$ sudo apt install -y cpu-checker
```



3) Install KVM on Ubuntu 22.04

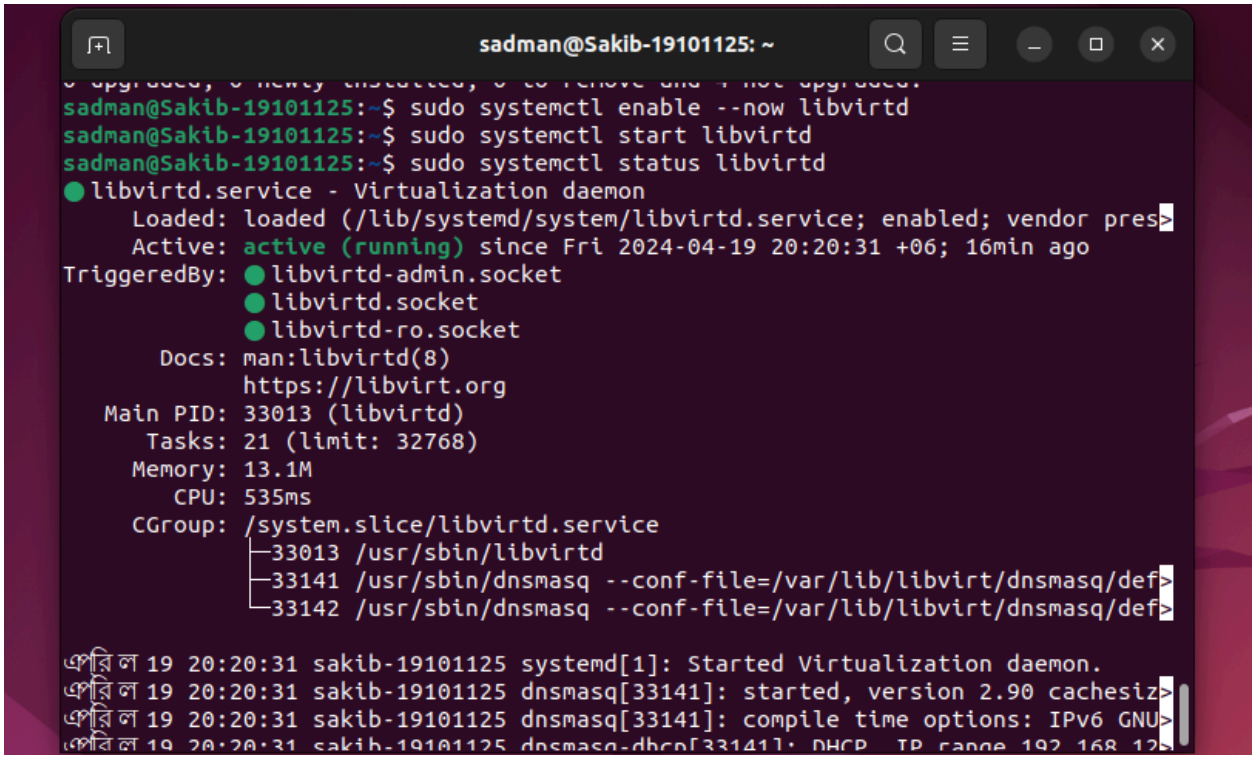
```
$ sudo apt install -y qemu-kvm virt-manager
libvirt-daemon-system virtinst libvirt-clients bridge-utils
```

4) Start & Enable Virtualization Daemon

```
$ sudo systemctl enable --now libvirtd
$ sudo systemctl start libvirtd
```

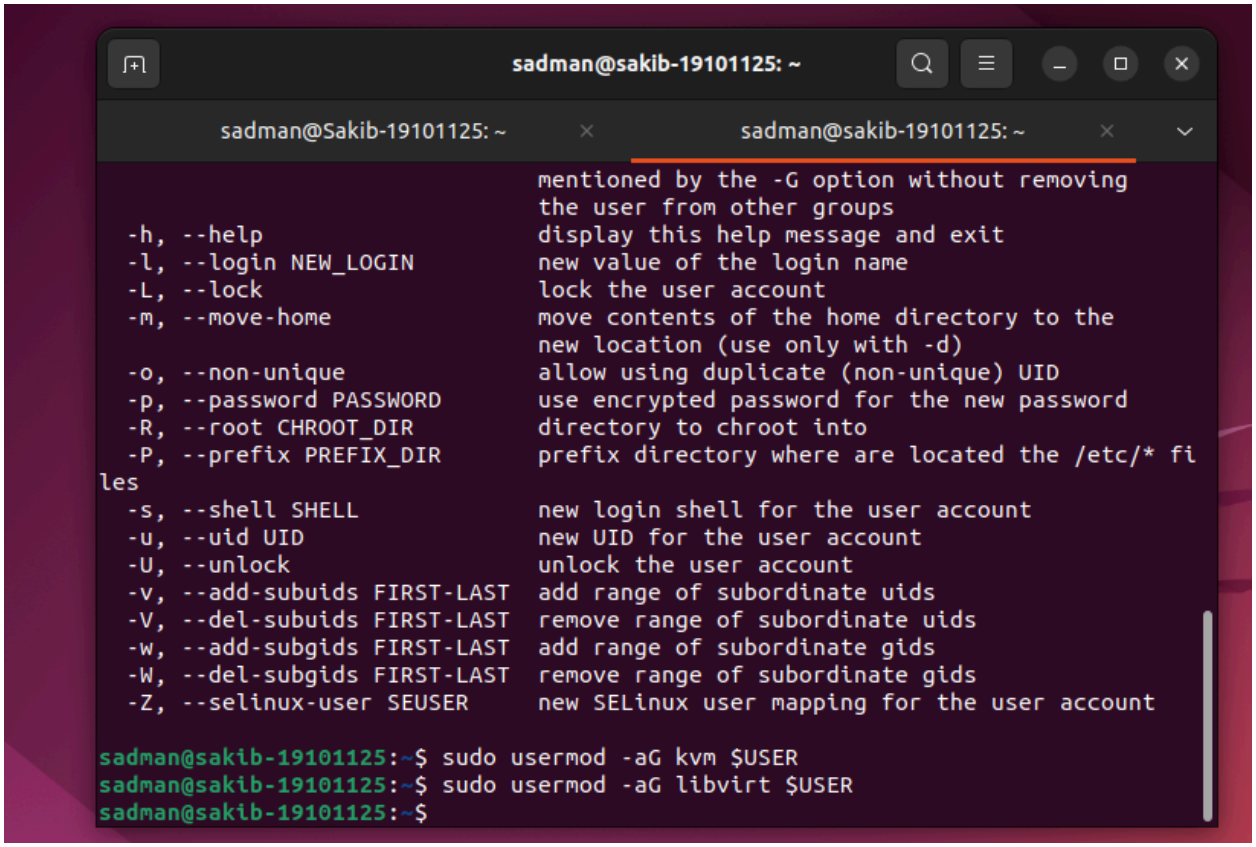
- Confirm that the virtualization daemon is running as shown:

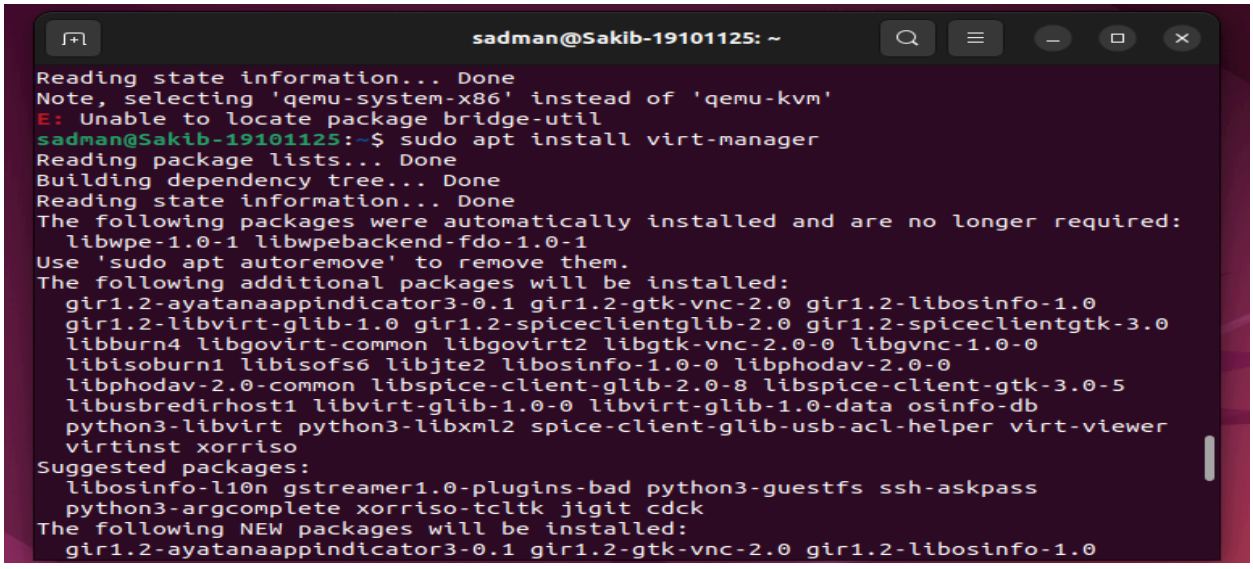
```
$ sudo systemctl status libvirtd
```

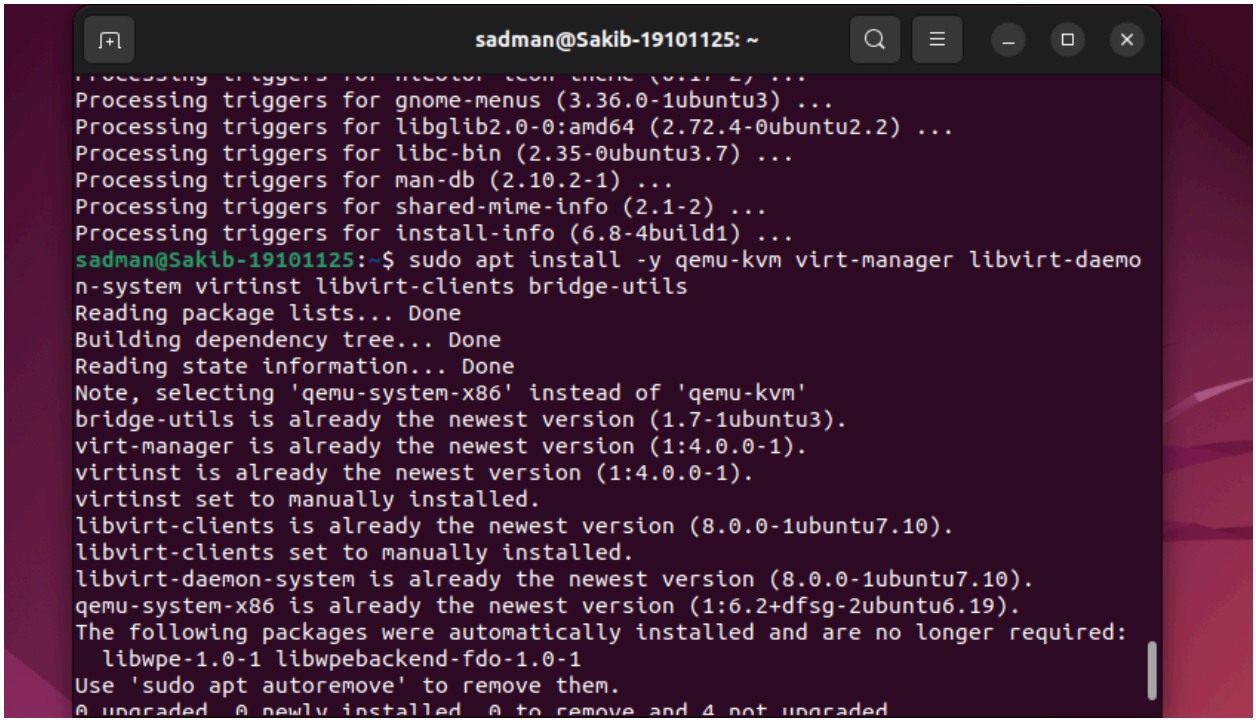


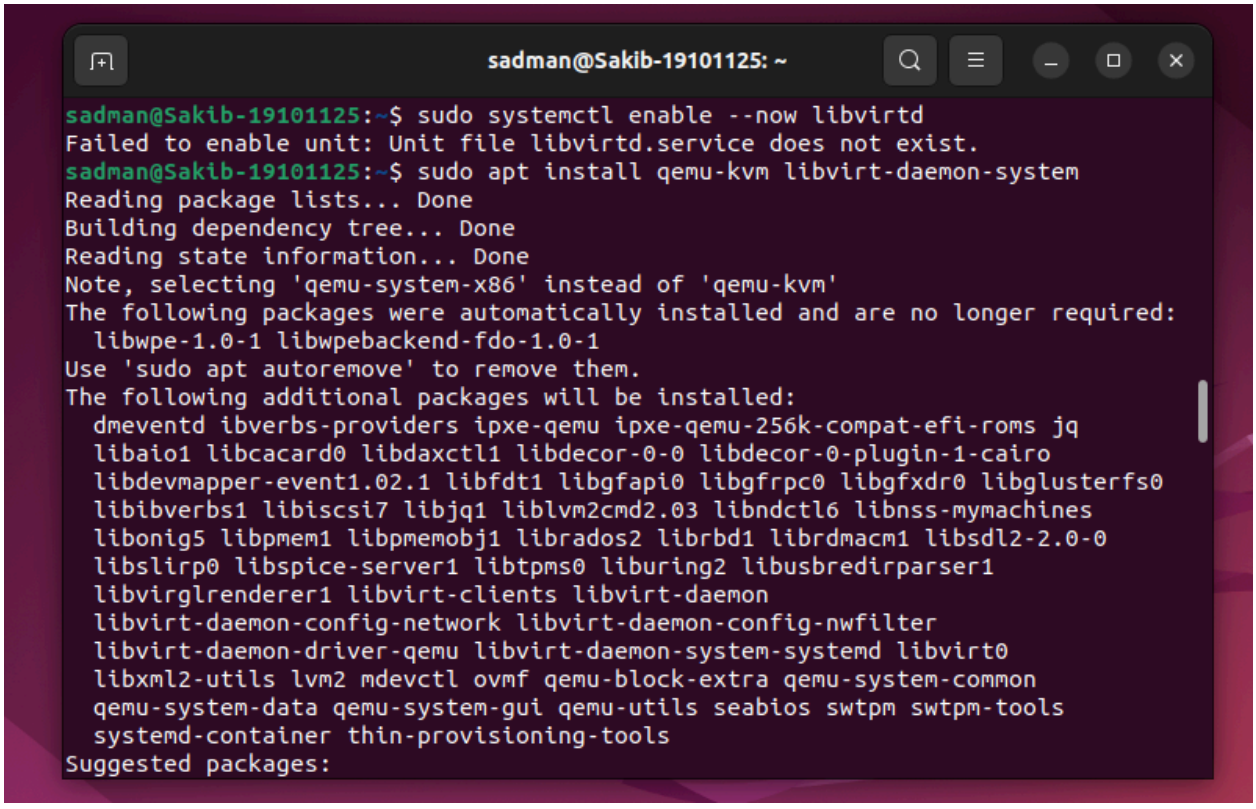
- Need to add the currently logged-in user to the kvm and libvirt groups:

```
$ sudo usermod -aG kvm $USER
$ sudo usermod -aG libvirt $USER
```



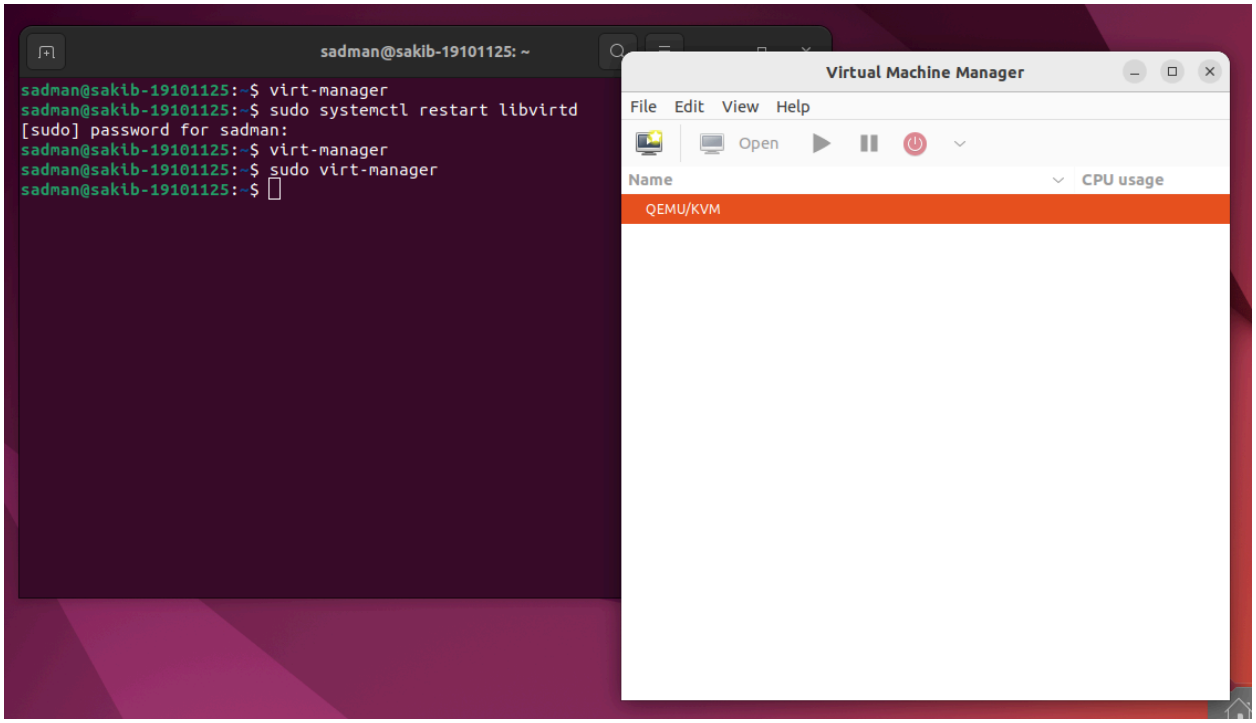



sadman@Sakib-19101125: ~
Processing triggers for gnome-menus (3.36.0-1ubuntu3) ...
Processing triggers for libglib2.0-0:amd64 (2.72.4-0ubuntu2.2) ...
Processing triggers for libc-bin (2.35-0ubuntu3.7) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for shared-mime-info (2.1-2) ...
Processing triggers for install-info (6.8-4build1) ...
sadman@Sakib-19101125:~$ sudo apt install -y qemu-kvm virt-manager libvirt-daemo
n-system virtinst libvirt-clients bridge-utils
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Note, selecting 'qemu-system-x86' instead of 'qemu-kvm'
bridge-utils is already the newest version (1.7-1ubuntu3).
virt-manager is already the newest version (1:4.0.0-1).
virtinst is already the newest version (1:4.0.0-1).
virtinst set to manually installed.
libvirt-clients is already the newest version (8.0.0-1ubuntu7.10).
libvirt-clients set to manually installed.
libvirt-daemon-system is already the newest version (8.0.0-1ubuntu7.10).
qemu-system-x86 is already the newest version (1:6.2+dfsg-2ubuntu6.19).
The following packages were automatically installed and are no longer required:
libwpe-1.0-1 libwpebackend-fdo-1.0-1
Use 'sudo apt autoremove' to remove them.

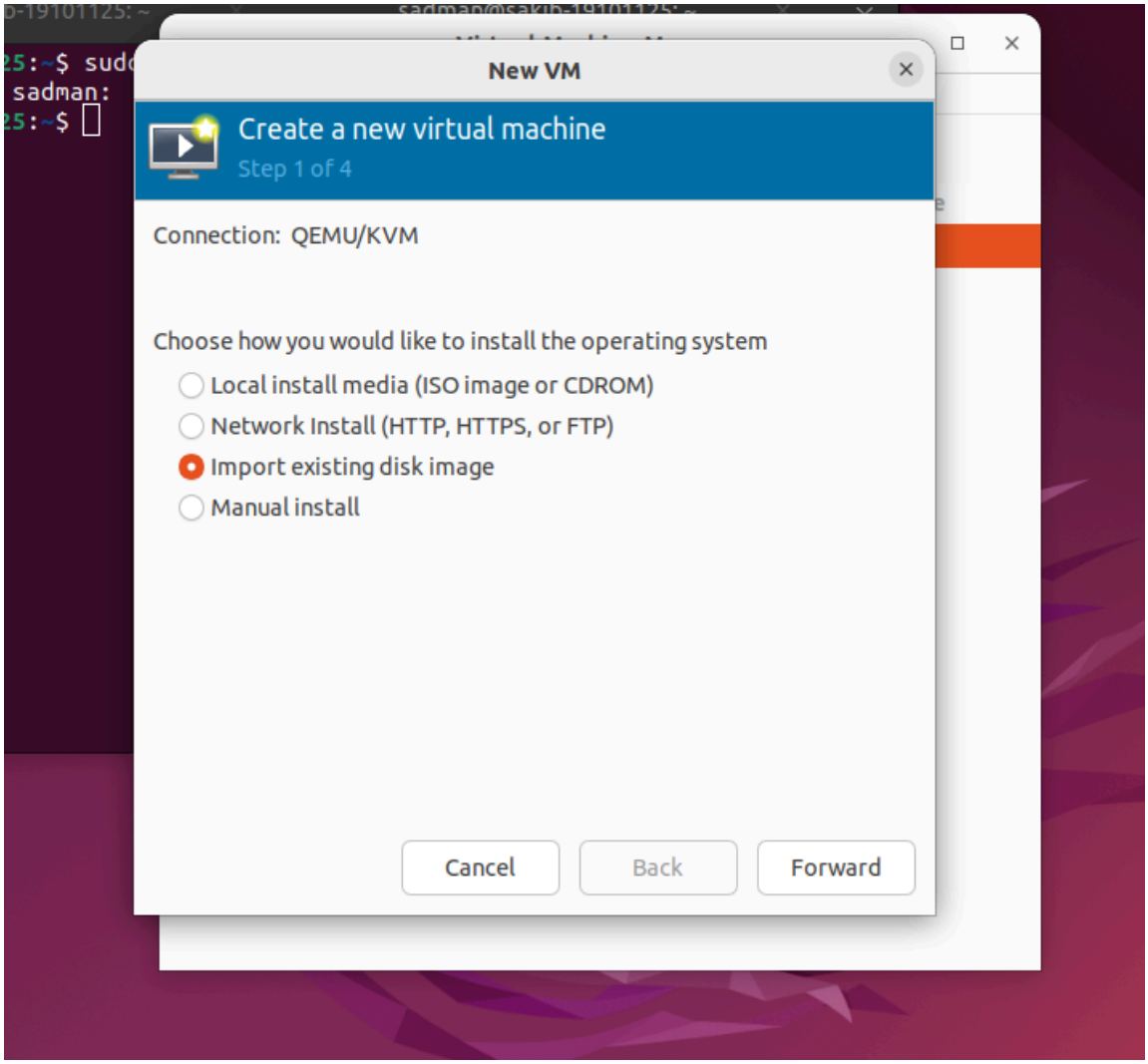

sadman@Sakib-19101125: ~
sadman@Sakib-19101125:~$ sudo systemctl enable --now libvirtd
Failed to enable unit: Unit file libvirtd.service does not exist.
sadman@Sakib-19101125:~$ sudo apt install qemu-kvm libvirt-daemon-system
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Note, selecting 'qemu-system-x86' instead of 'qemu-kvm'
The following packages were automatically installed and are no longer required:
libwpe-1.0-1 libwpebackend-fdo-1.0-1
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
dmeventd ibverbs-providers ipxe-qemu ipxe-qemu-256k-compat-efi-roms jq
libaio1 libcacard0 libdaxctl1 libdecor-0-0 libdecor-0-plugin-1-cairo
libdevmapper-event1.02.1 libfdt1 libgfapi0 libgfrpc0 libgfxdr0 libglusterfs0
libibverbs1 libiscsi7 libjq1 liblvm2cmd2.03 libndctl6 libnss-mymachines
libonig5 libpmem1 libpmemobj1 librados2 librbd1 librdmacm1 libsdl2-2.0-0
libslirp0 libspice-server1 libtpms0 liburing2 libusbredirparser1
libvirglrenderer1 libvirt-clients libvirt-daemon
libvirt-daemon-config-network libvirt-daemon-config-nwfilter
libvirt-daemon-driver-qemu libvirt-daemon-system-systemd libvirt0
libxml2-utils lvm2 mdevctl ovmf qemu-block-extra qemu-system-common
qemu-system-data qemu-system-gui qemu-utils seabios swtpm swtpm-tools
systemd-container thin-provisioning-tools
Suggested packages:

Part 2: Creating VM Using VMM using GUI

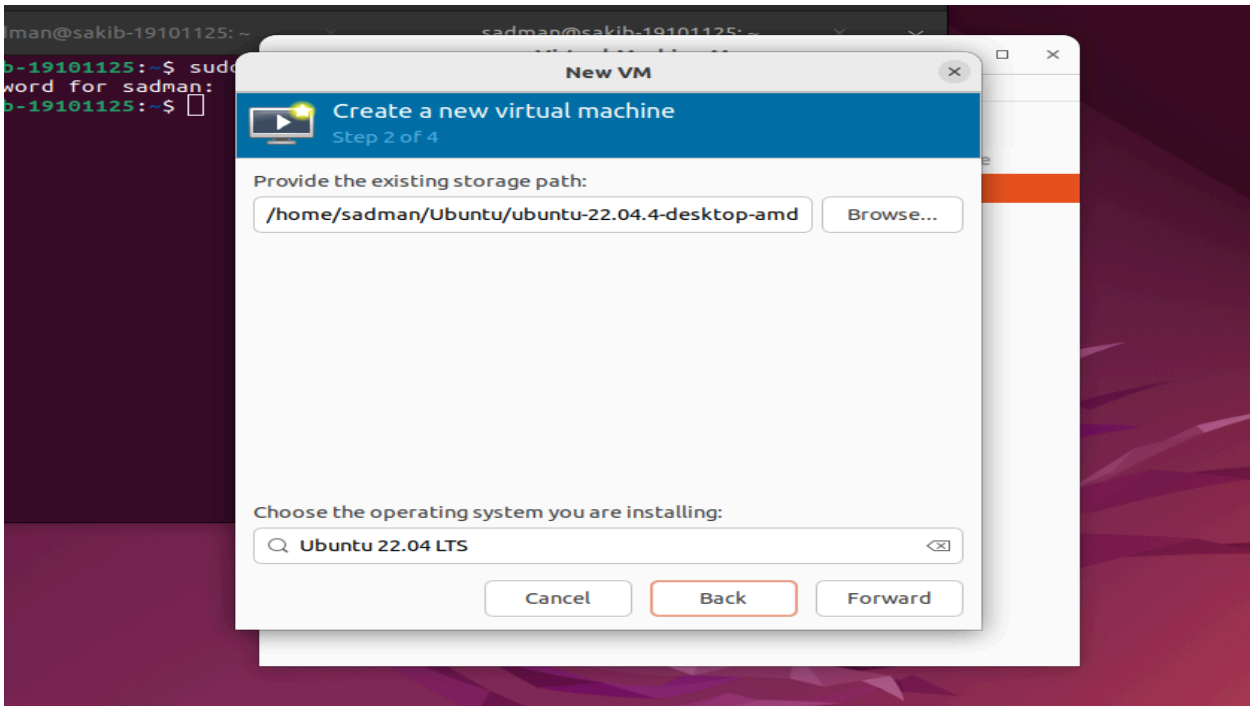
- Starting Virt Manager and Select “New Virtual Machine” from the “File” Tab

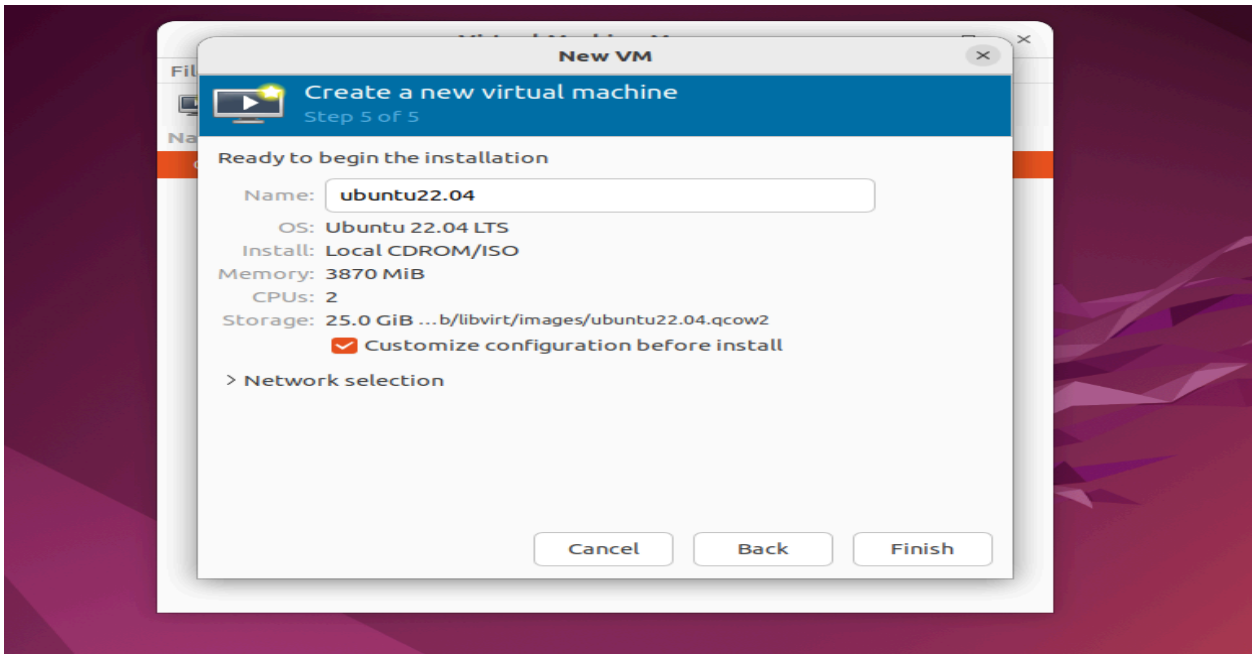


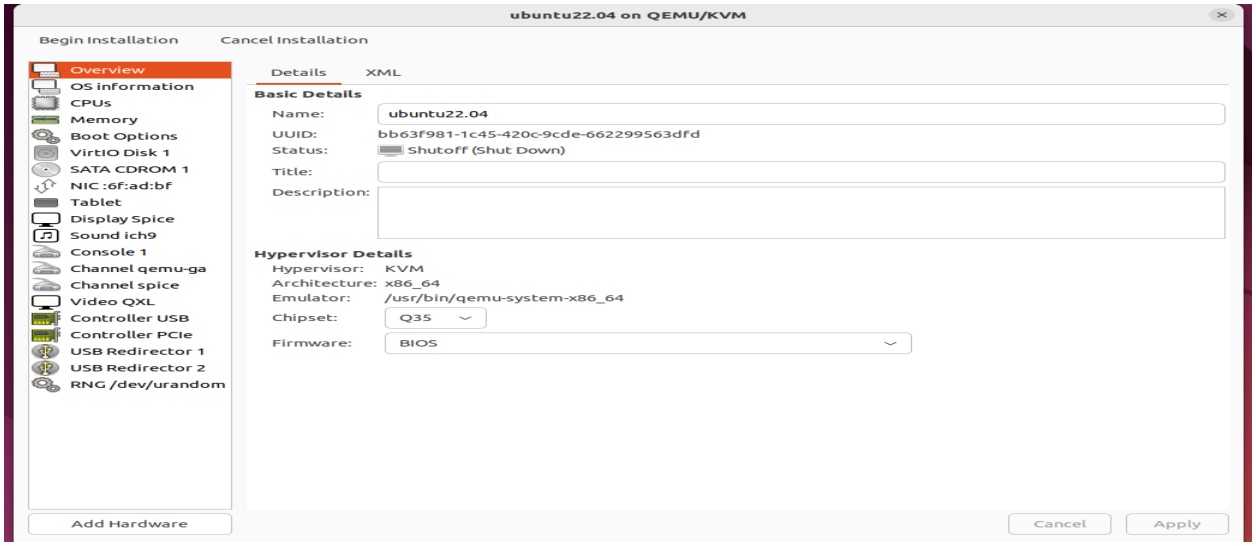
- Connection with Qemu/KVM is properly established. Select Local Install Media.



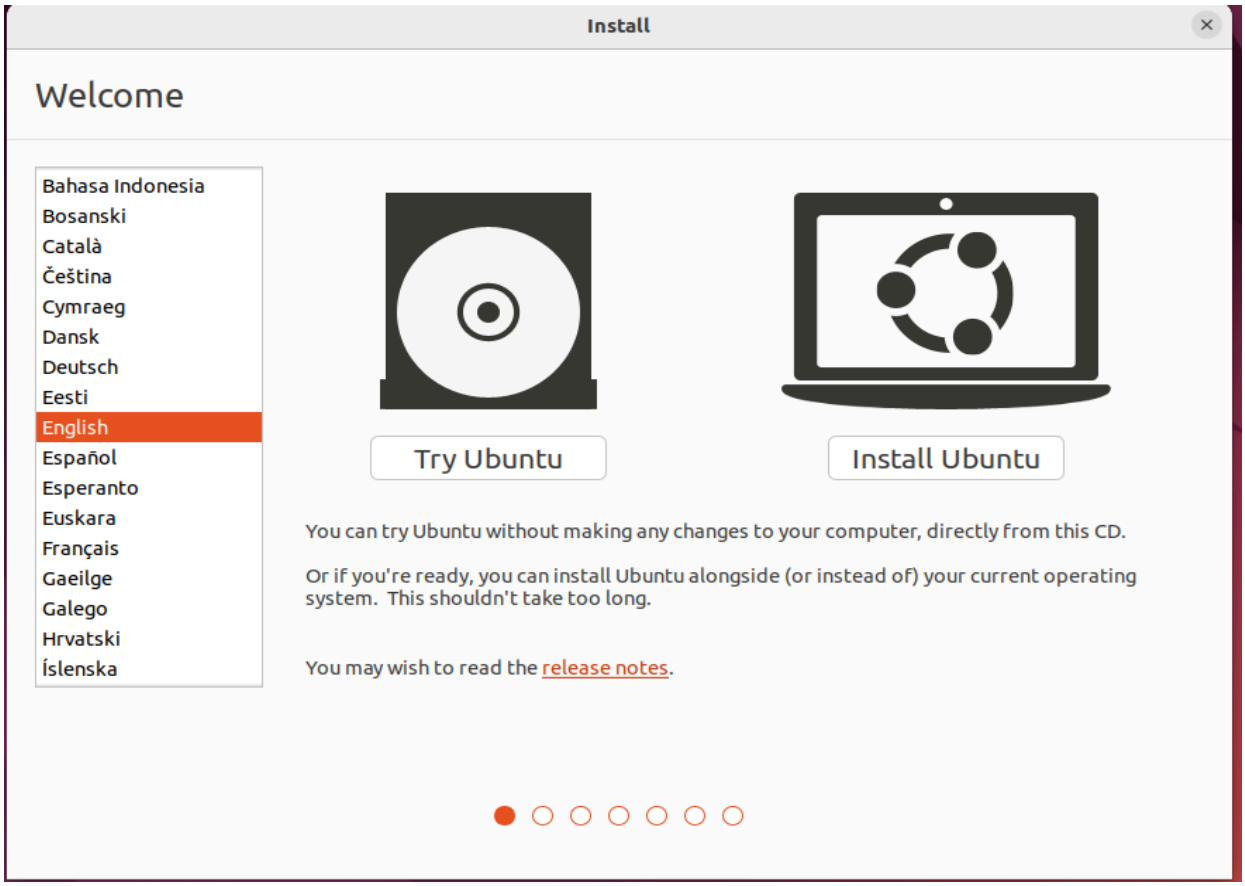
- Locate the iso Image from the local directory.

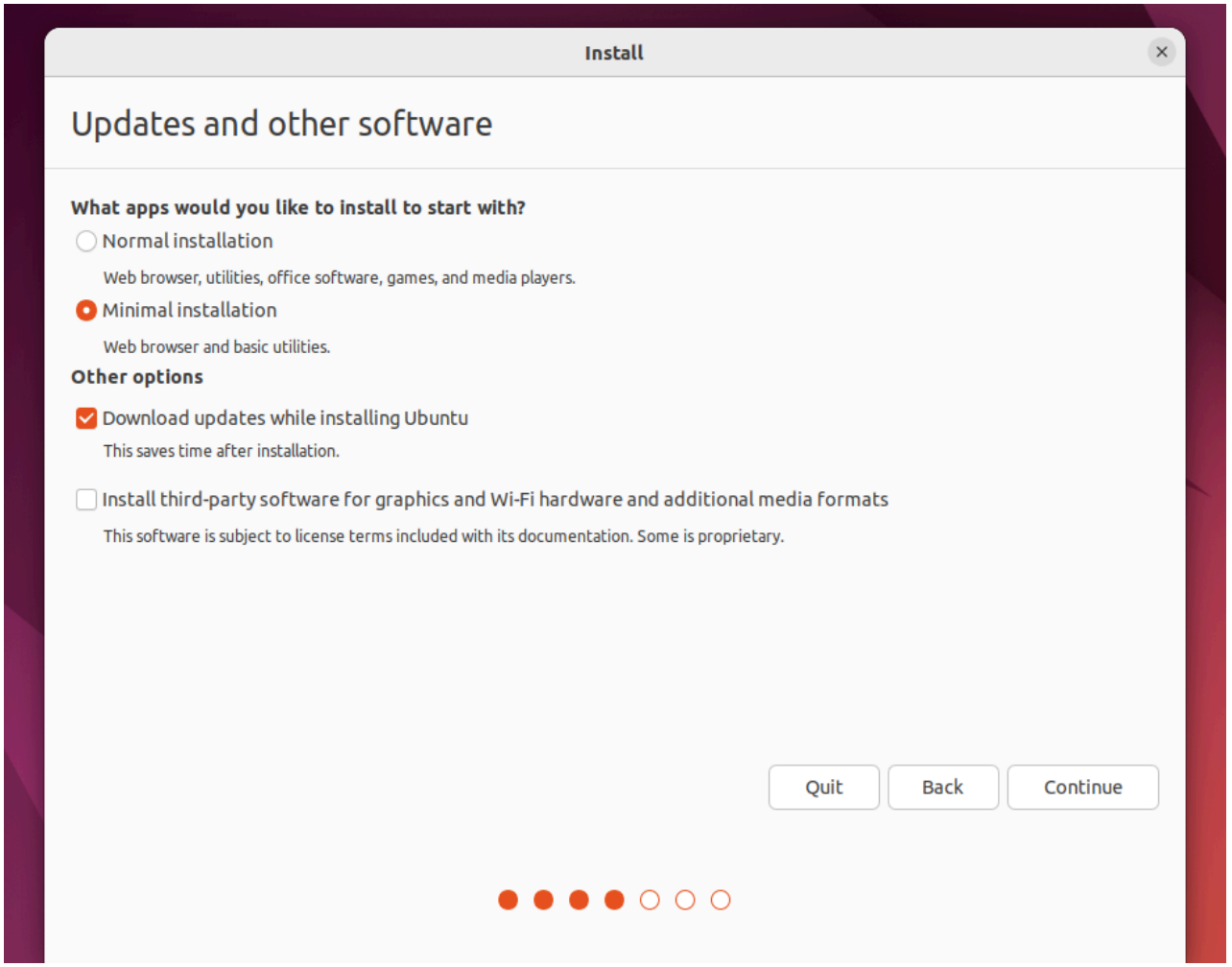


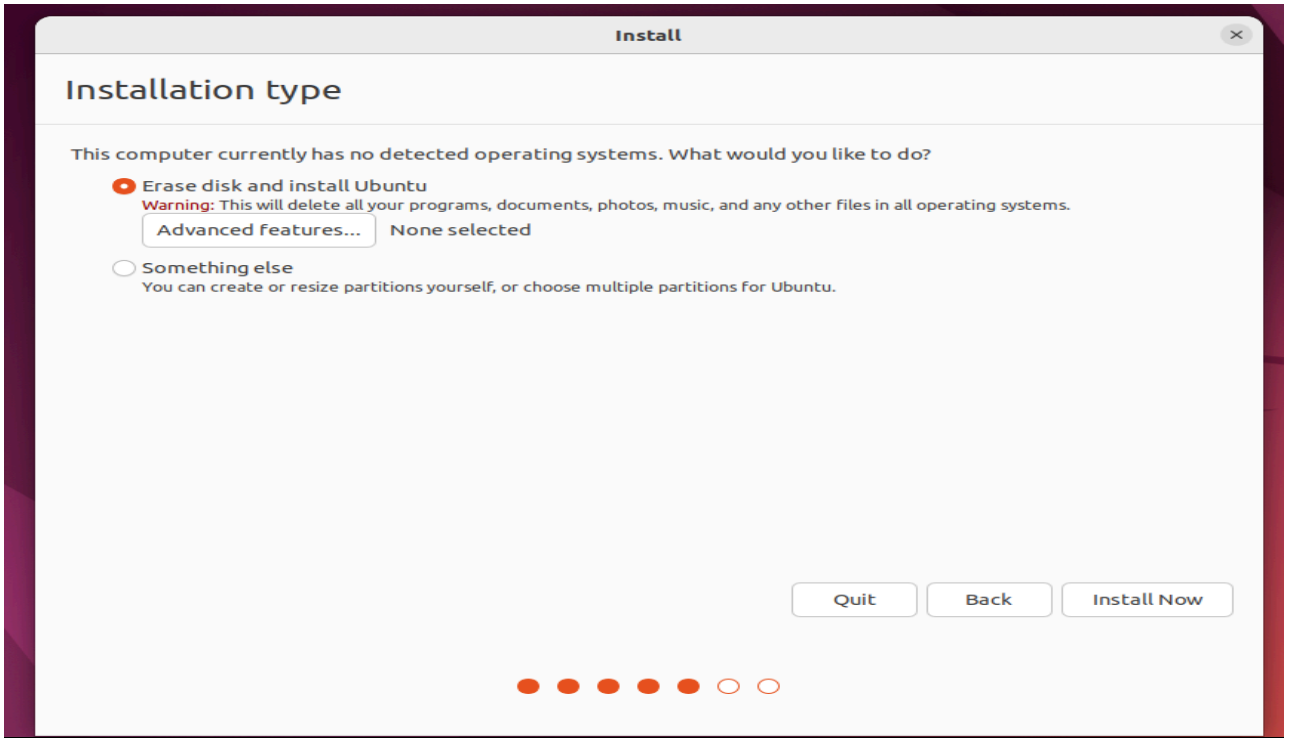


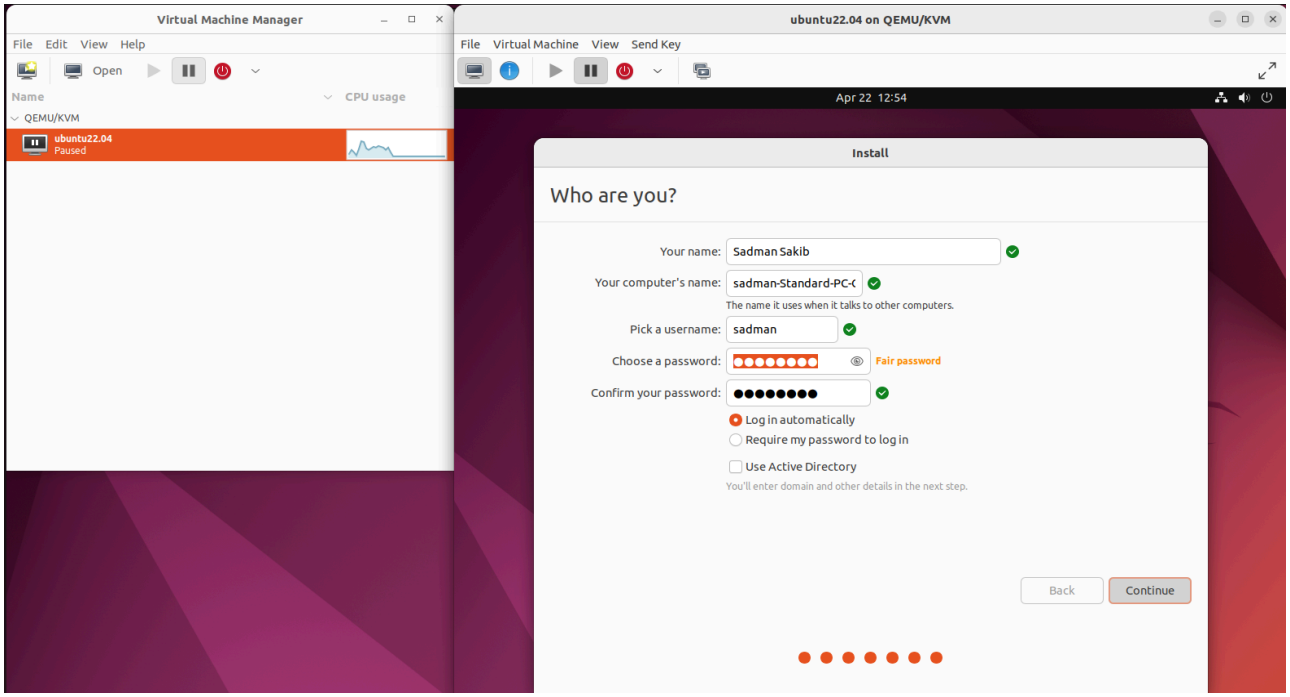


- Installation Ubuntu 22.04




Install
Updates and other software
What apps would you like to install to start with?
Normal installation
Web browser, utilities, office software, games, and media players.
Minimal installation
Web browser and basic utilities.
Other options
Download updates while installing Ubuntu
This saves time after installation.
Install third-party software for graphics and Wi-Fi hardware and additional media formats
This software is subject to license terms included with its documentation. Some is proprietary.
Quit
Back
Continue


Install
Installation type
This computer currently has no detected operating systems. What would you like to do?
Erase disk and install Ubuntu
Warning: This will delete all your programs, documents, photos, music, and any other files in all operating systems.
Advanced features...
None selected
Something else
You can create or resize partitions yourself, or choose multiple partitions for Ubuntu.
Quit
Back
Install Now


Virtual Machine Manager
File Edit View Help
Open
Name
CPU usage
QEMU/KVM
ubuntu22.04
Paused
ubuntu22.04 on QEMU/KVM
File Virtual Machine View Send Key
Apr 22 12:54
Install
Who are you?
Your name:
Sadman Sakib
Your computer's name:
sadman-Standard-PC-(
The name it uses when it talks to other computers.
Pick a username:
sadman
Choose a password:
Fair password
Confirm your password:
Log in automatically
Require my password to log in
Use Active Directory
You'll enter domain and other details in the next step.
Back
Continue